



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/881,722

06/18/2001

Giovanni Paoli

Q64988

7955

7590

08/11/2004

SUGHRUE, MION, ZINN
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

PAYNE, DAVID C

ART UNIT

PAPER NUMBER

2633

7

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application

09/881,722

Applicant(s)

PAOLI

Examiner

David C. Payne

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 3 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1, 2, 4-7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayeux US 5,390,040 (Mayeux) in view of Fischer et al. US 6,091,529 (Fischer).

Re claim 1, Mayeux disclosed

A transceiver for transmitting signals coming from a source (Figure 2 #50) of signal-carrying light to another transceiver and for receiving signals, said transceiver comprising a receiving reflecting surface (Figure 2 #10) for reflecting the received signal-carrying light, wherein it further comprises a single aperture for outputting the light to be transmitted (Figure 2 #22), said single aperture extending near to the outer edge of the receiving surface.

Mayeux does not disclosed transmitting or receiving coherent light.

Mayeux does not disclose that the receiving surface is defined by an outer edge.

Mayeux disclosed the reflecting surface (Figure 2 #50) is positioned at the "exterior aperture of the device". It would have been obvious to one of ordinary skill in the art

at the time of invention to make the "hot mirror" part of the exterior surface by moving the mirror slightly and attaching as an integrated part to the exterior wall for the ease of assembly.

Mayeux does not disclosed transmitting or receiving coherent light. Fischer disclosed using coherent light. It would have been obvious to one of ordinary skill in the art at the time of invention to use coherent light in the Mayeux invention for the advantage of keeping the optical frequency used for transmission freely selectable within a wide range, as disclosed by Fischer (Col. 2, lines 50-60).

Re claim 2, Mayeux disclosed

A transceiver including a main dish, wherein said main dish further comprises a first transmitting reflecting surface (Figure 2 #10) for reflecting the coherent light to be transmitted in a direction substantially perpendicular to the incoming direction.

Re claim 5, Mayeux disclosed

A transceiver wherein said output aperture is formed in the main dish. (Figure 2)

Re claims 6 and 7, Mayeux disclosed

A transmission system wherein it comprises a first and second transceivers placed at a distance one from the other and arranged in such a way that, considering a small divergence, the coherent light beams emerging from the transmitting aperture of the first transceiver overlap at the surface of the second transceiver and vice versa.

(Figure 2).

Re claims 4, 9 and 10, Mayeux disclosed wherein said output aperture is substantially in the form of an annulus and is formed on a plane surface. (Figure 2).

Re claims 11 and 12, the modified combination of Mayeux and Fischer further disclosed where said transmit and receive beams are spatially separated (Figure 2).

Allowable Subject Matter

4. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp



David C. Payne

Patent Examiner

AU 2633